



BOROUGH OF CHATHAM

ANNUAL REPORT OF THE MEDICAL OFFICER OF HEALTH FOR THE YEAR 1920



CHATHAM :
CLEMENTS BROS., MEETING HOUSE LANE.

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BOROUGH OF CHATHAM

To the Mayor and Corporation.

GENTLEMEN,

I have the honour of presenting to you my Annual Report dealing with the various circumstances affecting the health and mortality of the Borough during the year ending December, 31st, 1920. In the course of the war Social needs and conditions were so altered, staffs so reduced, and difficulties of one kind and another so great, that much had to be left undone.

In my Report for 1919 I drew attention to some of these difficulties and to two especially—viz: the social changes of that period, and the legacy of bad housing, and overcrowding, both of which still exist. The re-housing of the people is by far the most important problem of the day. It will solve many questions which without it are insoluble.

The need for houses is so great, so universally acknowledged, it has the support of all political parties, and yet on every hand there is resistance and opposition, and I fear there will be until there is a material reduction in the cost of building. One thing is quite clear, that the rates of sickness and mortality are high or low according to the degree of housing accommodation, and the number of inhabitants per dwelling and per acre. Combined with the need for better environment, the individual practice of hygiene leaves much to be desired. To put it very briefly disease is largely caused by dirt, and to a great extent people have the power to counteract it by practising cleanliness, and preventing dirt.

It is satisfactory to record a low general death rate, and a low infant mortality, combined with an increased birth rate. As regards Infectious Disease, Diphtheria has been very prevalent, but fortunately not attended by many deaths.

There was also a slight recurrence of measles in the early part of the year.

The Borough has now been divided into six wards instead of three of unequal size. The unit of population in each new ward does not differ materially, but most important from a public health view is the fact that comparisons of sickness and mortality can be

made with more accuracy, and their association with insanitary environment is easier to demonstrate. The returns of population cannot be estimated with accuracy, but the forthcoming census will give us reliable figures.

The Staff of the Department has always responded cheerfully to the many extra demands placed on it, and I am pleased to pay tribute to the ever ready and willing co-operation given by each member, and to the very efficient manner in which the duties have been performed.

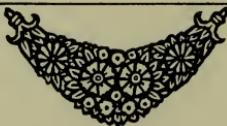
I desire to thank Mr. Coles Finch for supplying me with details of rainfall, Mr. Collard, Inspector of the Society for the Prevention of Cruelty to Children for much valuable assistance, and Mr. Scrace and other Poor Law Officials for willing help and co-operation.

The Council has always given full consideration to such reports as I have from time to time placed before it, and I thank the members for the courtesy and support which I invariably receive from them.

J. HOLROYDE, F.R.C.S., D.P.H.,
Medical Officer of Health.

Chatham,

April, 12th, 1921.



SPECIAL REPORTS TO COUNCIL

The following Special Reports have been made during 1920.

Brook Area Re-housing	April 12th
Brook Area	June 28th
Provision of Cleansing Station	April 15th
Prevention of Venereal Diseases	May 17th
Condition of Cowsheds	September 10th
Provision of Maternity Home	September 14th

SUMMARY OF VITAL STATISTICS.

Area in Acres (inclusive of water)	4443.298
,, ,, (inland water only)	4.356
Population (Census 1911)	42.250
Population (Civilians only) estimated by the	
Registrar General	
For Birth Rate	43.578
For Death Rate	39.966
Births registered	1.213
Birth rate per 1,000	27.8
Net Deaths registered.....	514
Death rate per 1,000	12.8
Zymotic Death rate (7 principle Zymotic	
Diseases	1.
Mortality from all forms of Tuberculosis, in	
cluding Phthisis	1.7
Phthisis Death Rate	1.4
Infantile Mortality per 1,000 Births	70
Number of occupied houses	9616
Total Rates in the £	18s. 4d.
A rd. Rate produces	£720

A.—Natural and Social Conditions of the District.

POPULATION.

Only an approximate estimate can be given, but it is probably about 48,000. There is considerable overcrowding of existing dwellings, it being common to find two or three families in one house.

For the purpose of calculating Birth and Death rates the Registrar-General has issued estimates of the civilian population in every district, together with a memorandum explaining points on which misunderstanding may arise.

1. The numbers of Births and Deaths are those registered during the Calendar year, and are corrected for inward and outward transfers. They differ therefore from uncorrected figures compiled locally either for the Calendar year, or for 52 or 53 weeks.

2. The "death rate" population excludes all civilian males whether serving at home or abroad.

The "birth rate" population is intended to include all elements of the population contributing to the birth rate, and consists of the death rate civilian population plus all non civilians enlisted from this country whether serving at home or abroad. This non-civilian element is distributed over all districts in the country in proportion to their estimated civil population.

3. The classification of some deaths is modified in the light of fuller information obtained after special inquiries, and may account for slight discrepancies between the Registrar-General's and locally compiled returns.

The two populations for 1920 issued by the Registrar-General are :—

For the Birth Rate	...	...	43,578
For the Death Rate	...	...	39,966

In 1918 and 1919 the Birth Rate populations were 42,207 and 40,638, and the Death Rate population 37,669, and 38,435.

PHYSICAL FEATURES, GENERAL CHARACTER, SOCIAL CONDITIONS.

The Borough of Chatham lies on the South Bank of the Medway. It joins Rochester on the North and Gillingham on the East. These three towns merge one into the other and form a long straggling area of which Chatham is the centre. Extension is only possible to the South East and South West where owing to its large acreage there is plenty of space for future development. The district is very hilly in character with valleys between the spurs of the

North Downs. The older houses are situated in the valleys but those built in recent years are on higher ground. Owing to the formation of the ground many of the streets are very steep.

The subsoil is chalk with a bed of brick earth in the Luton Valley and a varying depth of overlying soil. Many of the older streets are narrow with badly arranged and closely packed houses. There are amenities in the shape of valuable open spaces in the immediate vicinity of the town. Chatham is an important Naval and Military Centre and the river admits of vessels of large tonnage.

The main industry is centred in the Royal Dockyard but with the advantages of the river—the development of other industries in the vicinity is not improbable.

The bulk of the inhabitants are employed in the Dockyard, besides which there are soldiers and sailors, many pensioners, tradespeople, casual labourers, and non-descripts such as hawkers, general dealers, etc.

Several women are employed in the manufacture of ready made clothing chiefly as outworkers.

1.—Vital Statistics.

BIRTHS.

The number of Births registered as belonging to Chatham during 1920 was 1,213.

The number actually born in Chatham was 1,160.

Males	624	Females	589
Legitimate Births			1,158
Illegitimate Births			55
Birth Rate per 1,000			27.8
The number of Still Births was			46

The Birth Rate is the largest recorded during the present century.

During the period 1900 to 1909 (ten years) the average was 26.5 per 1,000.

From 1910 to 1914 (five years) it was 25.4 per 1,000, and from 1915 to 1919 (five years) it was 23.5 per 1,000.

The following Table shows the natural increase of population, that is the increase of births over deaths in each division of the Borough for 1919.

	Births	Deaths	No. of Births over Deaths
St. Mary's Ward	208	101	107
Christ Church Ward	199	70	129
Luton Ward	221	71	150
St. Paul's Ward	114	59	55
St. Michael's Ward	171	54	117
St. John's Ward	142	57	85
	—	—	—
	1045	412	643
Deaths in Institutions		98	129
	—	—	—
	510		514

The nett result is an increase of Births over Deaths of 514.

DEATHS.

The number of Deaths returned by the Registrar-General is 514.

The number of certificates of deaths received from the Registrar was 481, and 29 were transferred from other localities making a total of 510—a very slight discrepancy.

The rate of mortality per 1000 is 12.8.

The following table supplied by the Registrar-General shows the causes of death, etc., for each sex.

	Causes of Death in Chatham M.B. 1919 (Civilians Only)	Males.	Females.
	All causes	288	226
1.	Enteric Fever	1	
2.	Small Pox		
3.	Measles	4	8
4.	Scarlet Fever	1	
5.	Whooping Cough	3	1
6.	Diphtheria and Croup	11	2
7.	Influenza	6	3
8.	Erysipelas		
9.	Pulmonary Tuberculosis	35	22
10.	Tuberculous Meningitis	3	1
11.	Other Tuberculous Diseases	3	4
12.	Cancer, Malignant Disease	30	30
13.	Rheumatic Fever		
14.	Meningitis	2	
15.	Organic Heart Disease	30	21
16.	Bronchitis	13	21
17.	Pneumonia (all forms)	20	14
18.	Other Respiratory Diseases	3	5
19.	Diarrhoea, etc. (under 2 years)	5	4
20.	Appendicitis and Typhlitis		
21.	Cirrhosis of Liver	1	1
21a.	Alcoholism		
22.	Nephritis and Bright's Disease	3	5
23.	Puerperal Fever		3
24.	Parturition, apart from Puerperal Fever		4
25.	Congenital Debility, etc	22	11
26.	Violence, apart from suicide	9	3
27.	Suicide	4	1
28.	Other Defined Diseases	76	59
29.	Causes Ill-defined or Unknown	3	3
	Special Causes (included above)		
	Cerebro Spinal Fever		
	Poliomyelitis	1	
	Deaths of infants under 1 year of age		
	Total	53	33
	Illegitimate	9	7
	Total Births	624	589
	Legitimate	594	564
	Illegitimate	30	25
	Population	For Birth Rate, For Death Rate	43,578 39,966.

General Register Office,

Somerset House, London. W.C.2.

April, 1921.

Table showing Deaths registered month by month in each division of the Borough.

Month	St. Mary's Ward.	Christ Church Ward	Luton Ward	St. Paul's Ward	St. Michael's Ward	St. John's Ward	Work-house.	Totals
Jan.	7	7	4	6	5	6	9	44
Feb.	16	9	12	7	5	5	10	64
March	9	6	13	9	5	5	8	55
April	6	11	7	7	6	5	9	51
May	4	5	2	1	4	5	9	30
June	13	5	7	4	4	4	7	44
July	2	6	2	2		2	6	20
August	7	4	6	2	4	2	9	34
Sept.	7	1	1	3	3	3	10	28
October	3	3	4	5	2	6	8	31
Nov.	7	7	4	6	4	6	5	39
Dec.	7	4	7	4	7	4	8	41
Totals	88	68	69	56	49	53	98	481

The deaths occurring in the Medway Union are apportioned as follows :—

St. Mary's Ward	.....	51
Christ Church Ward	....	10
Luton Ward	.....	12
St. Paul's Ward	.....	8
St. Michael's Ward	.....	10
St. John's Ward	.....	7

If these figures are added to the totals given in the preceding table we get the following figures.

St. Mary's Ward	.....	139	or	29 per cent
Christ Church Ward	....	78	or	16 „ „
Luton Ward	.....	81	or	17 „ „
St. Paul's Ward	.....	64	or	13 „ „
St. Michael's Ward	.....	59	or	12 „ „
St. John's Ward	.....	60	or	13 „ „

These figures emphasise the effects of bad social conditions and bad housing, and are further commented on in the section devoted to housing. Nearly one third of the total deaths are credited to one ward, and besides those who succumb there is a relatively large proportion of sickness, incapacity, and diminished earning power.

AGES.

The number of deaths at various ages was as follows :—

Under 1 year	86
1 and under 5 years	42
5 " " 15 years	32
15 " " 25 years	31
25 " " 65 years	156
65 years and upwards	134

The number of uncertified deaths was.....16
 " " " deaths of illegitimate children was...16

INFANTILE MORTALITY.

Total deaths under 1 year	86
Rate per 1,000 nett births	70

The averages for the quinquennial periods from 1900 are

1901-5	150
1906-10	117
1911-15	115
1916-20	87

Of the total deaths under 1 year of age.

- 42 or 49 per cent. occurred during the first month
- 12 or 14 per cent. occurred between the 1st and 3rd month
- 15 or 17 per cent. occurred between the 3rd and 6th month
- 17 or 20 per cent. occurred between the 6th and 12th month

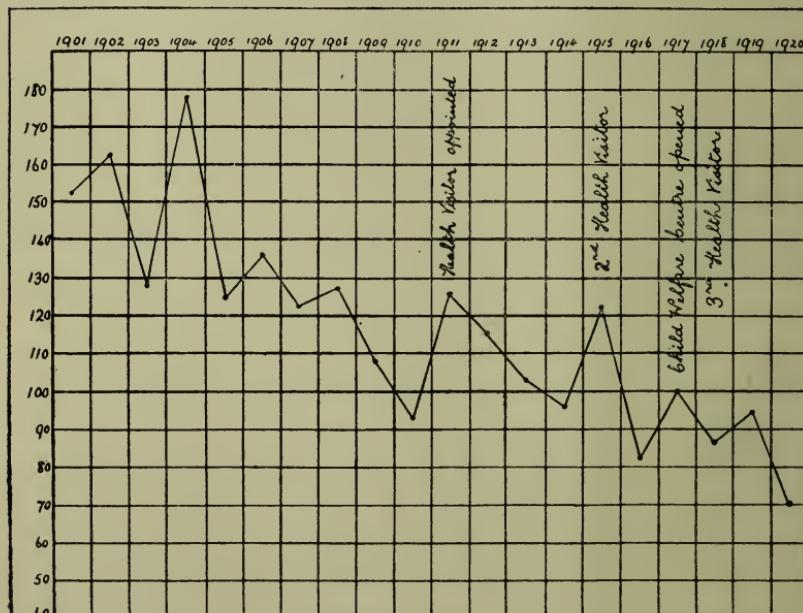
The following Table shows the deaths under 1 year of age, classified according to diseases.

Whooping Cough	1
Measles	2
Diphtheria	1
Atrophy, Marasmus	4
Syphilis	4
Congenital Defects	7
Convulsions	9
Diarrhoeal Diseases	9
Premature Births	19
Diseases and accidents at Birth ...	7
Bronchitis and Pneumonia	21
Other causes.....	4

Table showing Births, Deaths, and Infantile Mortality Rates for the past 10 years.

Year	Birth Rate	Death Rate	Infant Mortality Rate.
1911	26.3	15.8	127
1912	24.8	13.1	115
1913	26.	13.2	103
1914	25.	13.8	97
1915	21.	16.4	122
1916	24.9	15.	83
1917	22.5	15.5	100
1918	22.04	20.3	86
1919	21.8	14.8	95
1920	27.8	12.8	70

Chart showing Infant Mortality per 1000 Births 1900-1919



ORGANIC HEART DISEASE..

The number of deaths was 51, as against 67 and 69 in the two previous years.

CANCER.

From Cancer and other forms of malignant disease there were 60 deaths, as against 57 in 1919 and 46 in 1918.

RESPIRATORY DISEASES.

Excluding Phthisis there were 76 deaths from this class.

In 1919 there were 95 deaths

Climatic conditions, Influenza, and diminished individual resistance are the chief factors.

POOR LAW RELIEF AND HOSPITAL ACCOMMODATION.

The Administrative Area of the Borough and of the Poor Law Authority is not the same, the latter including Gillingham and a portion of Rochester. I am unable to obtain figures of the amount of Poor Law Relief in Chatham.

HOSPITAL ACCOMMODATION.

- (1) A General Hospital containing 105 beds, with a large out patient department. This Institution serves the needs of a large Urban and Rural Area.
- (2) The Poor Law Infirmary with 400 beds, of which 36 are allotted for Tuberculosis, 20 for children and 8 for maternity.

The pressure on the wards of the Hospital is very great and, there is always a waiting list, chiefly of surgical cases. The medical beds are not utilised in full, and many are occupied by surgical cases. Formerly Hospital treatment was confined to the necessitous poor, now the majority of patients are of a class who a few years ago would not have entered the wards of a general hospital.

The need for more accommodation is pressing, and could be met by the use of beds in the Medway Infirmary allocated to the use of the general public. but this can only be effected by a change in the law.

Hospital provision for Infectious Diseases is described under that heading.

B.—Sanitary Circumstances of the District.

WATER SUPPLY.

The District is fortunate in having an admirable supply of drinking water delivered constantly at a high pressure. Its only defect is that of hardness—the bulk of which is of a temporary kind and is removable by boiling, but it is this which leads to the furring of boilers and the blocking of hot water pipes.

The source of the water is the deep chalk formation—supplemented to a small extent by a supply from the lower greensand. The watershed is extensive, and the borings and headings are in the Luton Valley. There are three pumping stations—the chief one being at Luton, and smaller ones at Capstone and Snodhurst. The water is pumped into storage reservoirs, three in number—there being two on the Rainham Road and one at Bridgewood Gate on the Maidstone Road. Their joint capacity is over 9,000,000 gallons.

The Secretary of the Waterworks Company has kindly favoured me with copies of the most recent analyses (chemical and bacteriological). The four samples were taken from house taps and from Luton and Capstone Pumping Stations.

The results of the analyses are appended :

CHATHAM WATER CHEMICAL EXAMINATION.

I duly received the sample of water drawn from a house tap at Chatham on November 16th last and the results of my chemical analysis are as follows :—

	Grains per gal.
Solids.....	25.34 (White in colour)
Chloride	1.64 (2.7 Sodium Chloride)
Free Ammonia .....	.0003
Albuminoid Ammonia...	.0008
Nitrate .....	.41
Nitrite	Nil.
Oxygen Consumed ...	.0035
Total hardness	17.08
Temporary hardness ...	15.4
Permanent hardness ...	1.68

The sample was clear, nearly colourless and odourless. This water is very free from organic matter; with the exception of a

slight diminution in the permanent hardness, the chemical constituents show no variation since the former analysis of June 24th. I am of the opinion that this water is quite satisfactory for all domestic purposes.

5th November, 1920.

I beg to report to you that I have made bacteriological examinations of the four samples of water, collected from the Chatham district by my assistant on October 29th last. The samples were taken from :—

- No. 1 Star Hill, Rochester.
- No. 2. Pumping Station, Luton.
- No. 3. Pumping Station, Capstone.
- No. 4. No. 301, Canterbury Street, Gillingham.

The results of the analysis are as follows :—

	No. 1.	No. 2.	No. 3.	No. 4.
Organisms per c.c. at 20° C	18	4	7	18
ditto rapidly liquifying	1	less than 1	less than 1	1
ditto at 37.5° C.	2	1	1	3
Coli Organisms	absent	absent	absent	absent
	30 c.c.	30 c.c.	30 c.c.	30 c.c.

The bacteriological condition of these waters is, therefore, quite satisfactory and I am of the opinion that they are quite suitable for public supply.

RIVERS AND STREAMS.

The River Medway receives a large amount of crude sewage, some from civil establishments on its banks but the greater proportion is from the Dockyard, Naval and Military Barracks, Warships and trading vessels in the river.

DRAINAGE AND SEWERAGE.

The drainage question has been under discussion for at least 30 years, and for much of this period the policy of the Local Authority was to postpone it on the ground of expense.

Prior to the war the Joint Sewerage Board was moving actively towards its inception. A site for disposal was acquired, engineering plans approved, oyster fishery rights settled, and financial matters adjusted.

The cost would have been slight in comparison with that of to-day, and there are many who regret the want of vision which existed 25 years ago. But the drainage question remains an anxious

problem, and as time progresses and population increases it will become more so. An old argument was that when once the hole was dug, it would go for years without emptying, and the capacity of a cesspool in this respect was spoken of with pride. But the porosity of chalk has a limit, and the present position is that cesspools fill it up much more quickly than they did, and require more frequent emptying adding not only to the cost, but causing nuisance and inconvenience. The figures given in the statement of the Inspector of Nuisances are instructive. Unfortunately in many cases surface water from roofs, yards, etc., runs into cesspools, and adds materially to the labour and expense. I think that if this were dealt with in some other way a great gain would result. Much as a scheme of main drainage is desired, one has to admit that to-day it is not possible without placing a crushing burden on the ratepayers of the district, and the average ratepayer, whilst ready enough to apportion blame for the shortcomings of the present system will grumble more still when his desires are satisfied, and he has to foot the bill.

That is the present position. There is diminished soakage, rain water goes into cesspools and the result is increased applications for emptying.

The Council is improving its plant, and has utilised motor traction, and exhaust pumping to facilitate the work and at the same time effect an economy in working. To those who oppose the expenditure on the ground of cost—I can only say that if this work were stopped for one week the state of the town would be beyond description. The health of the public is the primary consideration and to carry out the work effectually the latest and most up to date appliances are required. Four tractor engines are now at work, each one capable of hauling three times the quantity that could be drawn by horse traction.

The sewage is disposed of in specially constructed bays outside the district, and is used for agricultural purposes.

CLOSET ACCOMMODATION.

The types of sanitary convenience in use comprise water closets with flushing cisterns, closets with pans and traps for hand flushing, trough closets at some schools flushed once or twice daily, and open privies. These latter abominations are slowly being reduced in number.

The approximate number of each type of Closet is as follows :—

Closets with flush	5213
Closets without flush ...	2548
Open privies	1558
Pail closets	45

Since the year 1914 there have been 337 conversions, 98 of which were converted during 1920.

SCAVENGING.

The arrangements are carried out by the Surveyor's Department, with one exception. Fish offal is removed by the Public Health Department in covered bins, collected daily in Summer, and three times a week in winter, and is taken away in a special covered van.

The bins are provided by the Council, and are cleansed each time they are emptied. There are no fixed ash pits in the town, neither is there any fixed type of moveable ash-bin. Variety is the key note. There is a Bye-Law which defines the type and character of the receptacle, but it is not enforced, except in regard to new houses.

Vehicles are of two kinds—the four wheeled wagon with metal covers, and two wheeled carts with canvas covers. In regard to the latter they could be greatly improved, and I trust that as occasion arises a lighter form of cart, slung low will be provided.

DISPOSAL OF REFUSE.

The present place of deposit is a tip in the Pickle Valley on the outskirts of Luton.

The number of loads removed during 1920 was over 10,000.

MANURE.

Under Sections 49 and 50 of the Public Health Act of 1875, powers exist to compel the removal of manure at fixed intervals. Notices are issued at the beginning of Summer and an Inspector is detailed to see that the notices are observed. Large heaps of manure are productive of nuisance, and are also the favourite breeding grounds of flies who carry filth and infection into houses and on to food. Hence the importance of this procedure.

The following Statement of the Inspector of Nuisances is in compliance with Article xx (16) of the L.G.B.'s. General order 1910, which requires him as soon as practicable after the close of the year to furnish the Medical Officer of Health with a tabular statement containing particulars of his work.

INSPECTOR OF NUISANCES REPORT, 1920.

Dear Sir,

I beg to submit to you my Annual Report dealing with the numerous sanitary matters carried out in the Borough during the year ending 31st December, 1920.

DRAINAGE WORK.

The work carried out under this heading is divided into two sections, viz :

- (a) That in connection with new buildings.
- (b) That in connection with old property.

New Buildings, private houses including four Council Houses and two Army Huts.....	12
Shops.....	2
Stables	1
New additions to old buildings ...	2

CESSPOOL WORK.

During the year 4735 applications were made being an increase of 782 over the preceding year. 9346 loads of liquid sewage and 2708 loads of night soil were removed.

The cesspool work is one of the most difficult problems to deal with in the Public Health Department, this is especially so during wet weather. Much of the new property built a few years ago is now becoming a trouble, for as the soakage becomes less, more frequent emptying is necessary. The cesspool applications increase each year by approximately 800, which necessitates the use of more plant and labour at an additional cost for the same.

The four tractor engines now in use for haulage greatly facilitate the work, they are able to take out 1200 gallons each journey, against 400 by horse haulage.

In order to shew how this work increases year by year, I have appended the cesspool applications for the past 3 years

1918	3159
1919	3958
1920	4735

The following are the cesspool applications each month during the past year :—

January	460
February	331
March	467
April	472
May	398
June	366
July	387
August	235
September	449

October	354
November	305
December	411

Number of choked drains cleared 157.

COMMON LODGING HOUSES.

The number of Common Lodging Houses registered is 11. One fell into disuse during the year and was removed from the Register.

Notices served. (a) To cleanse	4
(b) To repair	1

HOUSES LET IN LODGINGS.

Thirty-nine houses let in lodgings are on the Register, one has been added to the Register during the year, 129 visits were made to these houses and the following notices served.

(a) To cleanse	4
(b) To repair	1

SLAUGHTER HOUSES.

There are 12 Registered Slaughter Houses on the Register and one Licensed Slaughter House. Since the removal of control considerably more animals have been slaughtered, requiring more frequent visits. The unsound meat surrendered is after being denaturalized sent to a Tallow Melting Factory at Rainham for the extraction of Fat.

Notices served (a) To limewash	13
(b) To repair	3

UNSOND FOOD SIEZED—76 Carcasses of Mutton.

UNSOND FOOD SURRENDERED.

Carcasses of Beef	13
Quarter of Beef	7
Sheep Heads	6
Pigs Heads	2
Livers	19
Lungs	5
Udders	1
Kidneys	2
Diaphragms	2
Ox Tails	2

Smoked Bacon	383 lbs.
Foreign Rabbits	180
Kippers	146
Kippers (boxes)	146
Codlings (kip)	1
Herrings (barrels)	3
Mackerel (boxes)	3
Fillited Fish (boxes)	1
Fresh Haddocks (trunks)	1
Cod (trunks)	3
Corn Beef (6 lb tins)	10
Eggs	2345
Milk Condensed	1097 tins
Tomatoes (tins)	141
Butter	65 lbs.
Jams (tins)	15
Salmon (tins)	17
Crayfish (tins)	1
Sardines (tins)	5
Lobster (tins)	1
Pilchards (tins)	1
Malted Milk (bottle)	1
Jellies	1
Pork Pies	9
Paste Meat (tins)	19
Pickle Walnuts (bottles)	3
Pickle Onions (jars)	4
Brawn	5½ lbs.
Soup (tins)	2
Kidneys (tins)	6
Pickles (bottles)	4
Syrup (tins)	3
Cheese	7 lbs.

FISH OFFAL COLLECTION.

The fish offal still continues to be collected without cause for complaints. It is conveyed in covered sanitary bins in a specially constructed van. It is taken to Snodhurst Farm and dug into the land. The average collection is about 3 tons a week.

OFFENSIVE TRADES.

(1) There are 21 Fried Fish Shops on the Register, 2 were added during the year. During the War several shops were closed down and have not been re-opened.

(2)	Marine Store Dealers number	5
(3)	Gut Scrapers	1
	Notices served (a) To cleanse	2
	(b) To repair	1

KNACKER YARDS.

There are two Licensed Knacker Yards in the Borough, they are situated in the country. No complaints have been received in respect to these, periodical visits are made. Two Notices were served to cleanse and one to repair.

DAIRIES, COWSHEDS AND MILKSHOPS.

The number of Cowkeepers registered in the Borough is.....	10
Number of Cowsheds in use.....	16
The number of Registered Milkshops is.....	22
One was removed and one added during the year.	
Number of Visits made.....	166
Notices served (a) To cleanse	17
(b) To repair	0

INFECTIOUS DISEASES.

Cases removed to Hospital :—

(a) Scarlet Fever	87
(b) Diphtheria	186
(c) Enteric Fever	6
(d) Cerebro Spinal Meningitis ...	0
Number of Loads of Bedding Disinfected ...	407
Number of Library Books Disinfected	71
Work prohibited in the Homes of Outworkers	4

MORTUARY.

Bodies removed to Mortuary :—

(a) Men	9
(b) Women.....	3
(c) Children	3
Post Mortem Examinations	6
Buried at expense of the Parish ...	4
Suicides	3

BAKEHOUSES.

There are 23 Workshop Bakehouses on the Register but only 7 are now in use, 4 of which are under ground. There are also 5 Factory Bakehouses.

Notices served (a) To cleanse	2
(b) To repair	1

CONTAGIOUS DISEASES OF ANIMALS ACT.

One case of Parasitic Mange and one case of suspected Rabies were reported during the year, the case of suspected Rabies was not confirmed by the Board.

Twice during the year the Borough came within the 15 mile radius of the Foot and Mouth Diseases Order, prompt attention has been given to the Orders issued by the Board. The outbreaks published in the Local Press, and the various Orders circularised by post to all Farmers and Stock Breeders in the District.

NOTICES SERVED.

Form C Article 8 (5) Notice to cleanse, disinfect burn or destroy	2
----------------------------------------------------------------------------	---

NOTICES SERVED.

PRELIMINARY	487
P.H.A. 1875. Section 36	13
P.H.A. 1875. Section 41	2
P.H.A. 1875. Section 91	121
Housing and Town Planning Act 1909.	
Section 17	11
Housing and Town Planning Act 1919.	
Section 28	77
Towns Improvement Clauses Act. Section 74	3

VISITS.

Houses Inspected	651
Houses let in Lodgings	129
Fish Friers	89
Slaughter Houses	487
Knacker Yards	9
Cowsheds	50
Piggeries	45
Public Conveniences	87
Cesspool Work	453
Drainage Work	366
Complaints and Revisits	579
Courts and Alleys	115
Secondary Visits to work in progress	1388
Miscellaneous	522
Visits to Common Lodging Houses	80
Ice Cream Shops	24
Restaurants	33

Bakehouses	33
Workshops	201
Infectious Diseases	530
Outworkers	564
Tuberculosis cases	67
Stables	84

NUISANCES ABATED.

Accumulations of Manure removed	11
Bell Traps removed	26
Broken W.C. pans removed	34
Concrete yards repaired or provided	53
Cesspools reconstructed	95
Cesspools new, Dug.....	26
Ceilings repaired	68
Drains repaired	28
Drains ventilated	25
Drains relaid	39
Flushing cisterns repaired or provided ...	58
Floors repaid	94
Floors ventilated	4
Gullies provided	28
Houses with Privies converted to Water Closets	98
Inspection Chambers provided to Drains	11
Interior of Houses cleansed	282
Keeping of Animals in an unfit state	11
New sink waste pipes provided.....	30
New sinks provided	20
Miscellaneous repairs	306
Overcrowding abated	2
Privy Pits filled in	98
Roofs and Gutters repaired.....	191
Stables drained	3
Wash-houses repaired	18
Wash-houses rebuilt	1

W. HUGHES,

24th February, 1921.

Inspector of Nuisances.

PREMISES AND OCCUPATIONS CONTROLLED BY BYE-LAWS AND REGULATIONS.

Particulars of routine work, and the number and character of premises so controlled appear above in the Inspector's Statement. From time to time these premises are also visited by the Medical Officer of Health.

The following Bye-Laws and Regulations are in use :—

1. New Streets and Buildings.
2. Drainage of existing buildings.
3. The cleansing of footways and pavements, the removal of house refuse, the cleansing of earth closets, privies, ashpits and cesspools.
4. Nuisances.
5. The removal of offensive matter through the streets
6. The duties of the occupier in respect of house refuse
7. Offensive Trades
8. Slaughter Houses
9. Common Lodging Houses
10. Houses let in Lodgings
11. Tents, Vans, Sheds, and similar structures used for human habitation.
12. Mortuary Regulations
13. Dairies, Cowsheds and Milkshops Regulations
14. Control of Sanitary Conveniences
15. Knackers Yards

ADOPTIVE ACTS IN FORCE.

Infectious Diseases Prevention Act	1890
Public Health Amendment Act	1890
do. do. do.	1907
Private Street Work Act	1892

OTHER SANITARY CONDITIONS.

RABIES ORDER.

In connection with Rabies the Medical Officer of Health is required to take action in the case of persons bitten by a rabid animal, and to make arrangements for Anti-Rabic treatment if the diagnosis of disease in the dog is confirmed.

There were no suspicious cases during 1920.

RATS ORDERS 1918-1919

RATS AND MICE DESTRUCTION ACT 1919.

To recapitulate the reasons for action under the above is unnecessary. The destructive powers of the rat are enormous, and his capacity for spreading certain diseases is well known.

The campaign now being conducted is causing a large annual slaughter of rats, but until the owners of premises where food is stored take steps to cut off access to the rat—success will only be

of a partial character. So long as he is provided with food which he can easily obtain he will continue to increase and multiply.

The Rats and Mice Destruction Act, which came into force on January 1st, 1920, compels every person to destroy rats and mice on his premises. The penalty for non compliance is £5 to £50.

In order to carry out the provisions of the Act Chatham and Rochester agreed on joint action.

The provisions of the act were duly advertised. A Rat Catcher was appointed on January 26th to act under the direction of the Medical Officer of Health. His time is apportioned as follows:

3 days a week in Chatham.
2½ days a week in Rochester.

The measures in use consist of

1. Poisons—Rat Quit and the Extract of Squills, both of which are successful.
2. Varnish used in a few cases.
3. Traps.
4. Smoke box.
5. Dogs and Ferrets.

Careful returns of work and methods are kept, and a report is made monthly to the Health Committee.

Owners and occupiers are urged to protect food supplies, block holes, etc.

As intimated above this is where the greatest difficulty arises.

The following statement dealing with Chatham only shows the total results of the year's work.

RAT REPORT FOR 1920.

Total number of baits laid in dwelling houses	1236
Total number of baits taken in dwelling houses	1201
Total number of baits laid in shops, etc.	1760
Total number of baits taken in shops, stores, etc	1738
Total number of baits laid at Pickle	1736
Total number of baits taken at Pickle	1732
Total number of baits laid.....	4732
Total number of baits taken	4671
Number of dishes of liquid poison in dwelling houses ...	9 tins
Number of dishes of liquid poison in shops, stores, etc.	24 tins

Number of dishes of liquid poison at Pickle	58 tins
Total number of dishes laid	91 tins
Number of Rats caught in dwelling houses	265
Number of Rats caught in shops, stores, etc.....	953
Number of Rats caught at Pickle	3663
Total number of Rats caught ...	4881
Total number of Visits of Rat Catcher	1008
Total amount of Rat Quit issued	489 pkts. & 6 tins
Total Varnish boards laid	45
Applications from owners and occupiers	108

RAG FLOCK ACT 1911.

Samples of Rag Flock were taken from 3 premeses. In one case the flock did not conform to the standard of cleanliness laid down in the Regulations. A communication was made to the vendor, and the stock withdrawn from sale. The Council did not prosecute in this instance.

SCHOOLS.

The general sanitary condition of the schools is satisfactory and in all cases there is an ample supply of water from the Company's mains.

The Inspector of Nuisances pays weekly visits to all schools, and is instructed to pay particular attention to the state of the sanitary conveniences, to the cleanliness of walls, floors, etc., and to supervise and direct the work of the caretakers.

The condition of the schools is dealt with more fully in a report to the Education Committee. As regards Infectious Diseases, Teachers are supplied with a Schedule showing periods of exclusion for patients and for contacts whether kept at home or sent to Hospital, are informed of all cases notified to the Health Department, and supplied with certificates of return.

A list of children absent from non-notifiable diseases is sent to the Health Office by Head Teachers every week.

There has been no school closure during the year, but during the outbreak of Diphtheria in the Autumn many children with Sore Throats were excluded, and only allowed to return after a negative bacteriological examination.

C.—Food.

THE MILK SUPPLY.

Number of Registered Cowkeepers	10
Number of Cowsheds in use	16
Registered Milkshops	22

Particulars of visits made and notices issued are given in the Statement of the Inspector of Nuisances.

Periodical visits have also been made by myself, and reports as to the condition of sheds and animals put before the Council.

The Veterinary Inspector visits once every 3 months and reports on the condition of the cows as to health, and cleanliness.

The effect of these inspections is the securing of a standard of cleanliness which whilst far from perfect is better than it would otherwise be. In the best establishments there is room for improvement. The chief faults are the non-removal of manure from the sheds, the imperfect cleansing of the floors, the dirty state of animals, and also a low standard of cleanliness in the men who do the milking. Added to this is a want of appreciation by the cowkeeper of his duties and responsibilities in regard to these matters, and a tendency to resent advice or suggestion for improvement.

The whole question is one of sufficient labour, and its intelligent direction. The only sound point of view is that of public health, and regulations should be equally enforced in all areas. The promised Milk and Dairies Bill has been further suspended. This is a pity because existing powers are ineffective. Another point is that the Cowkeeper should himself be licensed, and subject to annual renewal.

Besides Milk produced within the district a large quantity is imported, some from farms situated in adjoining Boroughs, and a still larger quantity by rail, chiefly from the south western rural areas.

Inquiries show that the total amount of fresh milk consumed per head of population is about a quarter-pint daily, and that many families never use it at all relying on condensed milk which is often deficient in fat and overloaded with sugar.

Beyond the examination of cows for Tuberculosis of the Udder, or other signs of disease, no action has been taken in regard to tuberculous milk.

The Tuberculosis Order of 1914 is still suspended.

MILK AND CREAM REGULATIONS 1912 AND 1917.

No Action has been Taken.

MILK (MOTHERS AND CHILDREN) ORDER 1918.

A statement of the action taken will be found under Maternity and Child Welfare (page 11).

MEAT.

1. The inspection of cattle intended for slaughter, and of meat is carried out systematically. The Inspector attends the weekly cattle market at Rochester and notes the destination of animals sold to Chatham butchers. This is followed by visits to slaughterhouses and an inspection of the carcasses after killing.

Should a butcher be desirous of slaughtering between 11 p.m. and 7 a.m. in Winter or 11 p.m. and 5 a.m. in Summer or at any hour on a Sunday he must give one hour's written notice to the Council of any day other than Sunday, and in the case of Sunday at least 3 hours notice to the Inspector of Nuisances.

The effect of this supervision is to make the purveyors of meat extremely careful, and it is a common practice for them to ask for the inspection of any suspicious meat, and to voluntarily surrender the same.

A very large quantity of meat has been dealt with in this manner—details of which are given in the Inspector's statement. In one instance, that of a Vendor in the open market, 76 carcasses of Mutton were seized and destroyed. The appearance of some of the meat exposed for sale led to further inquiries, and an examination of 76 carcasses stored in dark, damp, dirty and unsuitable premises showed the meat to be mouldy, slimy and quite unfit for human food. The Stall holder expressed his wish to surrender after its seizure, and although the Council decided not to prosecute, he was very rightly deprived of his place in the market. For the sale of meat in the open market the following regulations are in force.

BOROUGH OF CHATHAM.

At a Meeting of the Council held on June 9th it was resolved :—

“THAT THE SALE OF FOREIGN AND FRESH BUTCHERS' MEAT IN THE OPEN MARKET BE NOT PERMITTED UNLESS THE REQUIREMENTS OF THE MEDICAL OFFICER OF HEALTH ARE COMPLIED WITH.”

The following conditions must be observed :—

1. Meat is to be screened from the sun, and protected from contamination by Flies and Dust.
2. At the end of the day it must be kept in cold storage, or removed from the Booth.
3. All woodwork must be thoroughly scrubbed and cleansed daily.
4. Bones and scraps of offal etc, must be stored in a covered receptacle and removed daily.

Town Hall,

Chatham,

J. HOLROYDE.

June 11th, 1920.

Medical Officer of Health.

The slaughterhouses are 14 in number, and the majority are visited once a week. A fair standard of cleanliness is maintained, but under no circumstances can private slaughterhouses be as satisfactory as a public one would be.

The allocation of animals has been discontinued, and there is no restriction on their class or number, which renders inspection more difficult.

2. There is no Public Slaughterhouse, and meat is inspected at the time of slaughter or as soon afterwards as possible by going from one slaughterhouse to another.

None of the slaughterhouses possess proper cooling rooms.

3. Action under Sec. 117 P.H.A. was taken in regard to 76 carcases of mutton.

4. For Tuberculosis there were condemned.

11 Carcasses of Beef

4 parts of Carcasses.

7 Lungs and Livers.

5. Number of Slaughterhouses in Borough.

	In 1914	January, 1920.	December, 1920
Registered	13	13	13
Licensed	1	1	1
Totals	14	14	14

OTHER FOODS.

A list of various unsound foods which have been destroyed is given in the Inspector's Statement. The supervision of food supplies is very important, and in this is included supervision of

places where food is cooked, such as kitchens of restaurants, fried fish shops, and bakehouses. A very large quantity of condensed milk and tinned food has been dealt with during the year.

There have been no cases of food poisoning in the district.

FOOD AND DRUGS ACT.

The administration of this Act is in the hands of the County Police. Samples are taken by the Superintendent or by an officer deputed by him, and are examined by the County Analyst.

The following is a return of the samples taken in Chatham under this Act during 1920 :—

Butter	8
Margarine	12
Lard	11
Jam	2
Coffee	3
Mustard	2
Tapioca	2
Ani. Tin. Quinine.....	1
Campd. Oil	1
New Milk	78
Cream of Tartar	1
Crushed Linseed	1
Tin. Iodine	1
Cod Liver Oil	1
Condensed Milk	2
Ground Rice.....	1
Arrowroot	1
 Total	 128

Proceedings were instituted in 4 cases as follows :—

Sample 1 Milk with 20% added water	... Fined £20 and costs
„ 2 Milk deficient in fat	„ £2 10s. and costs
„ 3 Milk deficient in fat and highly coloured	„ £25 and costs
„ 4 Milk deficient in fat	proceedings pending

D.—Prevalence and Control over Infectious Diseases.

Of late years the list of notifiable infectious diseases has received several additions. The following are now notifiable.

Scarlet Fever, Tuberculosis (all forms), Diphtheria, Membranous Croup, Ophthalmia Neonatorum, Typhoid (Enteric and Paratyphoid Fever), Malaria, Dysentery.

Puerperal Fever, Cholera, Erysipelas, Small Pox, Typhus Fever, Relapsing Fever, Continued Fever, Plague, Cerebro Spinal Fever, Acute Polio-Myelitis, Acute Encephalitis Lethargic, Acute Polio-Encephalitis, Trench Fever, Acute Primary Pneumonia, Acute Influenzal Pneumonia.

Table showing the number of cases of Infectious Sickness coming to the notice of the Medical Officer of Health during 1920.

Month	Scarlet Fever	Diphtheria	Enteric Fever	Puerperal Fever	Erysipelas	Malaria	Ophthalmia Neonatorum	Influenzal Pneumonia	Cerebro Spinal Fever	Acute Polio-Myelitis	Encephalitis Lethargica and Polio-Encephalitis	Dysentery	Pulmonary Tuberculosis	Non-Pulmonary Tuberculosis
Jan.	6	9	I		I	I	I	I					4	I
Feb	3	6		2		4		I					4	
March	6	5				2	2	I					5	
April	12	10	I		I	I	I	I					6	
May	11	9											7	
June	15	23			I	I	I						4	
July	13	20	I									2	6	I
August	8	28	I			I		I		I	I		5	I
Sept.	6	19	I	I		I			I				I	2
October	9	45	2		2		I						2	
Nov.	8	50	3		2		I	5					II	4
Dec.	13	37	I		I		I	I					3	I
Totals	110	261	II	3	8	5	12	II		I	I	3	58	10
Remov'd to Hos.	87	187	8				2							

HOSPITAL PROVISION FOR INFECTIOUS DISEASES.

1. St. Williams' Hospital for the reception of Scarlet Fever, Diphtheria and Enteric Fever. A limited number of cases of Cerebro Spinal Fever can also be admitted.

This institution contains 80 beds.

2. Small Pox Hospital with 24 beds.

Both are for the joint use of Rochester and Chatham.

During the year owing to the prevalence of Diphtheria the Hospital was used to its utmost capacity, and from time to time, the admission of new cases had to be restricted to those of a very urgent character.

DISINFECTION.

All clothing, bedding, etc., is removed in a specially constructed van and disinfected by current steam in a Thresh's Disinfecting Apparatus.

407 loads were removed and disinfected in 1920.

Rooms are fumigated by Formalin Vapour, or Sulphurous Acid Gas.

A solution of Perchloride of Mercury is supplied for the disinfection of Enteric Fever excreta, and Izal is supplied for the sputum of Tuberculous patients.

Much more important than the fumigation of a room is its thorough cleansing, and exposure to air and sunlight.

The practice of supplying disinfectants indiscriminately for pouring down drains has been discontinued, and none is given out except under certificate.

SCHOOLS AND INFECTIOUS DISEASES.

There has been no school closure during 1920.

All known cases of infectious disease are excluded, also children from infected houses and other known contacts. The Head Teachers are supplied with information of all notified diseases, and with a printed schedule containing advice for action in respect of various diseases.

During the Diphtheria outbreak the Head Teacher was instructed to exclude all cases of sore throat, and forward names and addresses to the Health Office. Each was bacteriologically examined, and not allowed to return to school without written permission.

Head Teachers forward a return once weekly giving the names and addresses of children absent on account of Measles, Whooping Cough, Chicken Pox and Mumps.

BACTERIOLOGICAL WORK.

All specimens are sent to the County Council Laboratory at Maidstone. The arrangements for the forwarding of specimens and the result of examinations work very satisfactory.

The following Table shows the number of specimens sent during 1920, and the results of examination :—

	Total No. Forwarded	No. Giving Positive Result	No. Giving Negative Result
Diphtheria	524	164	360
Enteric Fever—blood ...	12	5	7
,, ,, fæcæs & urine	8	3	5
Pulmonary Tuberculosis	120	39	81
Ringworm of Scalp	32	23	9
Cerebro Spinal Fluid	1	—	1
 Totals	 697	 243	 463

415 specimens were sent by Medical practitioners, and 282 by myself.

The deaths during 1920 from the more important infectious diseases were as follows :—

Enteric Fever	1
Measles	12
Scarlet Fever	1
Whooping Cough	4
Diphtheria	13
Diarrhœa and Enteritis under 1 year.....	8
Influenza	9
Pulmonary Tuberculosis	57
Other forms of Tubercu- losis	11

Contacts with or carrier of the following diseases arrived in the district and were kept under observation until the end of the incubation period.

Small Pox	14
Bubonic Plague	1

SMALL POX.

No cases have been reported.

Fourteen contacts from abroad arrived in the district. 10 had been re-vaccinated, and 4 were done on arrival.

VACCINATION.

The Vaccination Officer has supplied me with the following particulars of vaccination in the Rochester and Chatham area during 1920.

No. of Births	1643
Successful Vaccinations	948
Objections	626
Percentage Vaccinated	58

SCARLET FEVER.

Cases notified	110
Deaths	1
Households affected	93
Removed to Hospital	87
Percentage removed	80

Local Incidence

St. Mary's Ward	14
St. John's Ward	15
St. Michael's Ward	12
St. Paul's Ward	21
Luton Ward	43
Christ Church Ward	4

Table showing particulars of Scarlet Fever during the past ten years.

Year.	Total No. of cases notified.	No. under 5 years.	Deaths registered.	Treated in Hospital.	Attack rate per 100 of population.	Mortality per 1000.	Percentage removed to Hospital.
1911 ..	145	35	3	88	3.4	.007	60
1912 ..	207	36	—	131	4.8	.002	63
1913 ..	96	22	1	65	2.2	.002	68
1914 ..	107	17	—	74	2.5	.008	65
1915 ..	126	26	4	92	2.8	.004	70
1916 ..	88	13	2	70	2.	.004	79
1917 ..	52	8	—	43	1.2	.002	83
1918 ..	93	7	2	81	2.1	.004	87
1919 ..	56	7	1	49	1.2	.002	88
1920 ..	110	16	1	87	1.8	.002	80

DIPHTHERIA.

Cases notified	261
Deaths	13
Households affected	219
Removed to Hospital	187
Percentage removed	72

Local Incidence

St Mary's Ward	32 or 12 p.c.
St. John's Ward	31 or 12 p.c.
St. Michael's Ward ...	55 or 21 p.c.
St. Paul's Ward	34 or 13 p.c.
Luton Ward	70 or 26 p.c.
Christ Church Ward	39 or 15 p.c.

Age Incidence

Under 5 years	42 cases
5 to 15 years	198 "
15 years upwards	21 "

No. of cases notified each month

January	9	20 1st Quarter
February	6	
March	5	
April	10	42 2nd Quarter
May	9	
June	23	
July	20	67 3rd Quarter
August	28	
September	19	
October	45	132 4th Quarter
November	50	
December	37	

Table showing cases notified and deaths from Diphtheria during ten years 1911-20:—

Year	Cases Reported	Deaths	Death rate per cent of those attacked
1911	74	5	6
1912	269	15	5
1913	139	8	5
1914	202	23	11
1915	96	13	13.5
1917	76	3	4.
1917	34	2	6.
1918	31	1	3.
1919	27	2	7.
1920	261	13	5.

The outbreak commenced in June, declined in September during school holidays, and reached its maximum during November, 76 per cent. of the cases were amongst school children, and were fairly equally distributed throughout all the schools.

The epidemic has been accompanied and preceded by many cases of apparently simple sore throat.

At the latter end of May a series of cases occurred amongst children living in the same houses as cases notified in March and April who were employed at some works in the town. An examination of the employees at these works resulted in the discovery of two carriers residing in houses in which the children were affected. The carriers were probably infected from the earlier notified cases. Further examinations of contacts were made, and 4 other carriers were found in the affected households. As these children had been attending School prior to the receipt of notifications they had no doubt passed on the infection to others, and cases began to be notified in larger numbers during June, July and August.

The following factors were in my opinion largely contributory to the spread of disease.

1. Overcrowding of dwellings consequent on the shortage of housing accommodation.
2. Delay in calling in Medical advice, very many cases being ill for periods varying from 3 days to 3 weeks before being seen.
3. Slight and unrecognised cases.
4. Pressure on Hospital Wards.

Measures Adopted.

- (a) Circular letters to teachers respecting exclusion of all Sore Throats, and the transmission of their names and addresses to the Health Office.
- (b) The routine bacteriological examination of all the above.
- (c) Notices to doctors respecting the provision of Anti-toxic Serum, and use of syringes.
- (d) Removal to Hospital whenever possible.
- (e) Exclusion of contacts from schools, etc.
- (f) Disinfection.

With respect to the use of Anti-toxin in Diphtheria, which is a powerful remedy in large doses, and a prophylactic in smaller ones the following action was taken.

In order that no difficulty should occur in its use, owing to the temporary absence of the necessary apparatus, Syringes were provided and are stored at the Town Hall and at the Fire Station where they are lent to doctors on application. In order to encourage the administration of large doses, Diphtheria Anti-toxin is supplied in a concentrated form. A dose should never be less than 5,000 units, and in the more severe cases 10,000 to 20,000 units is advisable. The result of this policy was to largely increase the use of Anti-toxin.

Up to the end of October there were 173 cases in which Anti-toxin was administered to 49, or 28 per cent.

In November and December there were 88 cases, 51 of which had Anti-toxin, or 58 per cent. These figures relate to its use before admission to Hospital, when it is always given, but the fact that it will be used on admission should not prevent its use in all cases before admission.

Promptitude is the essence of success, and its routine use early in the disease, and in a sufficiently large dose would almost render Diphtheria a non-fatal disease.

Carriers.

242 children were examined by me, and swab cultures made. 24 carriers were discovered, and were kept from school until the throat was clear.

In each case parents were notified that the child might be infectious to others, a certain degree of isolation was maintained, medical treatment was advised and in many cases obtained.

Evidently in all cases the bacilli in the throats of carriers are not infective, if this were so every carrier would be the cause of other cases. This does not happen, and in many instances of households and school classes, their presence has not been associated with the onset of other cases. It is probable that they only become virulent under certain conditions, which are as yet not definitely known, and it is a safe rule to regard every carrier as a potential source of infection. In this as in all other diseases much depends on individual resistance, and an attack in one may be so mild as to be unrecognisable, and in another very marked and attended with danger to life.

The beds at the Isolation Hospital were not sufficient for the accommodation of all the cases, and in November and December admissions were restricted to the most urgent cases, and to those where the home arrangements did not admit of treatment, so that as a marked factor in the prevention of disease the Hospital may

be ruled out. It is also not generally realised that so long as there is delay in securing treatment and diagnosis at home, the Hospital can do little to prevent the spread of infection, which takes place before the removal of the patient.

A reference to the subjoined Chart will show that there is a recurrence of outbreaks after a series of years of low incidence.

Thus in 1896 there was a sudden rise followed by a gradual decline to a low level which was maintained until 1912, declining again, and again rising suddenly in 1920.

Between 1896 and 1912—16 years elapsed, between 1912 and 1920—8 years.

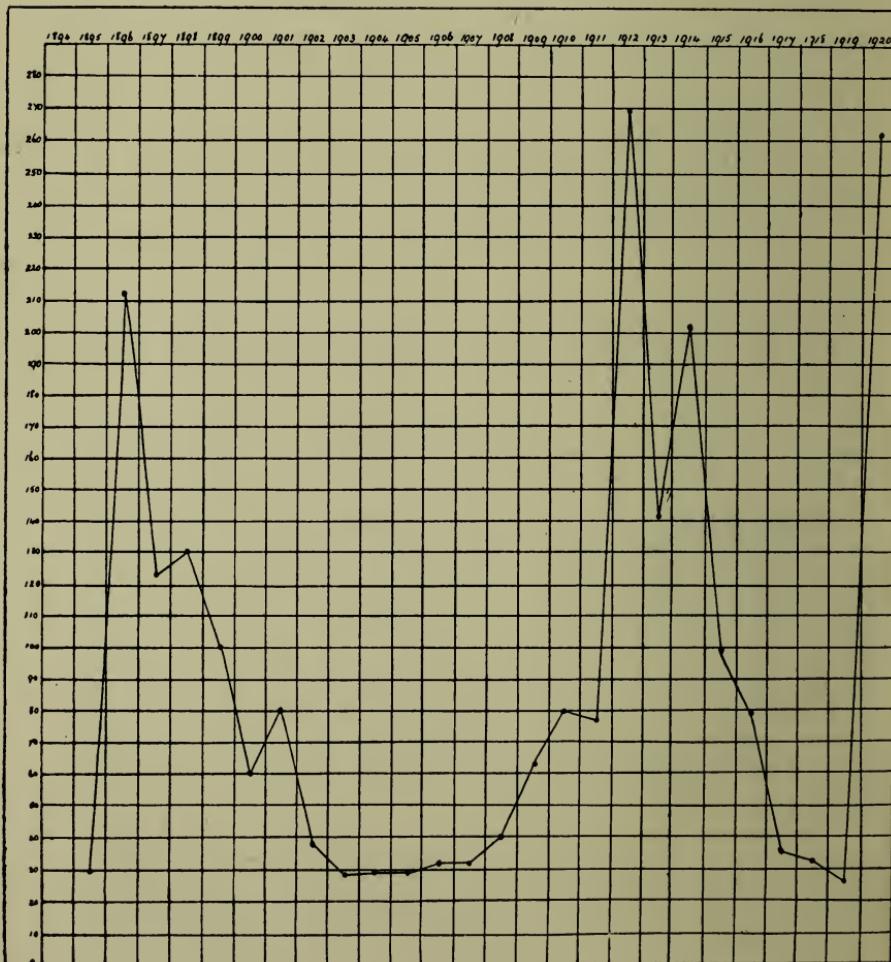


Chart showing yearly incidence of Diphtheria, 1920

There is no evidence of any special connection with insanitary conditions-- except that of overcrowding. The disease prevailed on the hills as much as in the valleys, in dry houses and in damp, amongst the poor and the well-to-do.

Some observers have advanced the opinion that damp houses on a damp soil predispose to Diphtheria. The soil here is chalk, and natural drainage is good, besides which the months of greatest prevalence were very dry the total rainfall for October, November and December being only 3.44 inches. It is very doubtful that the infecting organism has any life at all outside the human body, and in my opinion the infection is purely personal.

The grouping of cases is a marked feature, and when a case occurred in any particular street it was invariably followed by others in the immediate vicinity.

I think that the carrier case is only slightly infective, and principally so if owing to catarrhal conditions there is coughing or sneezing which disseminates the bacilli.

The most infective carriers are children with nasal discharge, and the greatest factor in the spread of Diphtheria is the unrecognised case, combined with delay in sending for the doctor.

ENTERIC OR TYPHOID FEVER.

Eleven cases were notified in 9 households. There was one death. Three were treated in the Medway Infirmary 5 in St. Williams Hospital, and 3 at home.

Eight of the cases were amongst children under 12 years of age. A group of 6 occurring in October, November and December lived close together in Whittaker Street and Rhode Street. Two in the same house were notified on October 4th and 11th respectively. The first having been ill for 12 days before notification. On the 18th November a child six doors away was notified: ill for 15 days previously. On the 19th and 22nd two other cases were reported living opposite each other, and about 50 yards from the previous case which was kept at home. One of these was kept at home, and on the 15th December a child in the same house was notified and removed to Hospital.

Dates of Onset	Date of Notification	Treated.
September 23rd	October 4th	Medway Infirmary
October 4th	October 11th	do.
November 18th	November 3rd	Home
November 19th	November 9th	Home
November 22nd	November 13th	Hospital
December 15th	December 3rd	Hospital

The original source of infection could not be traced, nor any definite information as to food, drink, or previous illness obtained. The home circumstances were unsatisfactory, and the habits of the people such that proper precautions against the spread of disease were not observed, and the danger of contamination of food very probable. After removal to hospital, and a thorough cleansing of premises there were no further cases, but in one instance of a child of 4 kept at home, the obstinacy of the parents resulted in the occurrence of two other cases in January of the present year.

Whatever may have been the cause of the first case it is abundantly clear that unskilled attention at home was the cause of the subsequent cases.

OPHTHALMIA NEONATORUM.

There were 12 cases notified. Particulars will be found in the section dealing with Child Welfare.

None of the other notifiable infectious diseases call for special comment.

MEASLES AND GERMAN MEASLES.

These are no longer notifiable diseases, and information respecting their prevalence is obtained from weekly returns sent in by Head Teachers. Measles was epidemic during 1918 and 1919 and in February 1920 there was a slight recurrence confined to children attending the Infant Departments of a few schools. The outbreak soon subsided, but 12 deaths were registered. The cases were visited and nursing assistance was given where required. The large fatality associated with measles is due to Bronchitis or Pneumonia, and its reduction can be brought about by treating the illness seriously from the first—isolating the patient in a warm well ventilated room, calling in a doctor, and obtaining the assistance of a skilled nurse.

The same observations apply to Whooping Cough. Early recognition and adequate care are the chief essentials, and the Health Visitors are able to give valuable help and advice in all cases coming to the knowledge of the department.

INFLUENZA.

Has not been markedly prevalent. 9 deaths were registered giving this as the primary cause. A stock of prophylactic vaccine was obtained from the Ministry of Health for use in case of an outbreak, and all medical men were advised, but there were very few applications.

ZYMOTIC OR INFECTIVE ENTERITIS.

Commonly known as Diarrhoea, Enteritis or Gastritis. There were 8 deaths of children under 1 year of age. Hot weather, dirty home conditions, contamination of milk, and mismanagement are the chief causes.

The Health Visitors give special attention during the summer months to houses of this character. Where babies are fed artificially the increasing use of dried milk largely diminishes the risks of bacterial contamination.

VENEREAL DISEASES.

A centre for the free treatment of these diseases is held at St. Bartholomew's Hospital, under County administration.

It is open four times weekly.

For Men, Tuesdays and Thursdays, 5.30 to 7.30 p.m.

For Women, Thursdays, 3 to 5 p.m. Fridays 11 a.m. to 1 p.m.

No recommendations are required.

In 1918 there were 185 new cases.

In 1919 there were 595 new cases

In 1920 there were 484 new cases.

The figures for each Quarter of 1920 were as follows :—

	New Cases	Males	Females	Total Attendances
1st Quarter	152	111	41	1907
2nd Quarter	88	68	20	1501
3rd Quarter	112	86	26	1466
4th Quarter	132	103	29	1539
Totals	484	368	116	6413

140 of the new cases resided in Chatham, many of the remainder coming from a wide area, and some being temporarily resident in the district.

494 patients were treated by Salvarsan or its substitutes, and 1485 doses of these preparations were injected.

These arrangements are entirely for the cure of Venereal Diseases, but facilities for early treatment whilst of service in mitigating the serious after effects of disease are of little avail in checking its spread. The greatest safeguard is that of chastity in both sexes. This should be enjoined at all times, but if people will take risks—then they should have knowledge of such measures as will safeguard them from these risks.

In April, 1920, your Health Committee passed the following resolution.

“ That, realising the gravity and ill effects of Venereal Disease in this Country, the Council be recommended to favour the issue of advice by Local Authorities on the prevention of Venereal Disease ”

This was confirmed at a meeting of the Council in May, without a dissentient.

At the next meeting of the Health Committee the following report was read, and the proposals for public instruction were adopted and confirmed by the Council in June.

BOROUGH OF CHATHAM.

To the Chairman and Members of the Public Health Committee.
Prevention of Venereal Diseases.

GENTLEMEN,

The resolution approved by the Council on May 12th with respect to the issue of advice by local Authorities on the prevention of Venereal Disease induces me to make some further comments on the subject because the mere passing of a resolution will achieve nothing unless some effort is made to give practical effect to the principles underlying it, also as the procedure advised will conflict with the opinions of some sections of the community it is necessary to give reasons for the adoption of the policy. The extent to which Venereal Diseases are affecting the public health is not generally known, but there is no greater tragedy being enacted to-day than that caused by their ravages. Until very recently the subject has been so carefully kept in the back-ground that only a few of the public are even now beginning to realise its extent, and to understand that it is something more than a retribution for the guilty, because in thousands of cases its effects fall with equal force on the innocent.

There is still a large mass of public opinion which sees in measures for preventing Venereal Disease a menace to morality, and whilst their motives can be respected, their conclusions are not justified, and the real facts of the case are not given full consideration. I think if the people whose moral, religious or ethical sense is offended by these proposals could visualise the terrible legacies of disease in the shape of blindness, deafness, paralysis, insanity, imbecility, serious skin and bone disease, and intractable disease of the internal organs in women they would alter their views.

Men and women are not moral from fear of consequences, but because of their inner conviction of what is right or wrong, but it is not my province in this report to discuss morality or mankind's primal impulses, but as your Health Officer it is my duty to advise you to the best of my ability of all measures which will tend to prevent disease, and I should be lacking in this essential if I failed to state my convictions in regard to this very important subject.

Now, Venereal Disease is easy to prevent but difficult to cure, but in spite of this the attempt to cure has taken precedence, and free treatment centres are everywhere available. The treatment of existing disease, whilst necessary, does little or nothing towards prevention, and preventive measures have been largely ignored, although logically the primary function of every Health Authority is the prevention of disease.

Firstly—the practice of continence is a certain means of prevention, and should be enjoined and encouraged in every possible way, secondly failing this—the practice of immediate self disinfection will have an enormous effect in lessening the incidence of these diseases.

There is no doubt of this, and in the male sex self disinfection is easy to carry out, but it is most important that the advice given should be clear and definite and that the antiseptics to be used and the method of using them should alike be simple and easy to understand.

It is not the function of the Local Authority to take upon itself the distribution of preventives, but it may with propriety issue advice and instructions relative to their proper and effective application. The Society for the Prevention of Venereal Diseases has drawn up instructions for self disinfection, and with the sanction of the Council I propose to adopt the following steps for public instruction.

- (1) Post Notices in Public Urinals.
- (2) To supply printed leaflets containing information respecting self disinfection to the male population, these leaflets to be obtained by application at the Health Department.
- (3) To notify by advertisement in the Press that such information is obtainable on receipt of a stamped addressed envelope, or on personal application.

I am, Gentlemen,

Your obedient servant,

Chatham,

May 17th, 1920.

J. HOLROYDE,

Medical Officer of Health.

A further resolution in favour of the compulsory notification of these diseases was adopted at the same time.

Steps were at once taken to give effect to these proposals, and there have been many applications for information.

I venture to think that the public as a whole approve of this policy, and I know many who were opposed to it under the idea that it will encourage immorality have now modified their views. One has to recognise that the use of preventive measures not only protects a man from the consequences of his act, but that it materially diminishes the risks to innocent persons, and will lessen the sum total of disease masquerading under other names, but really due to Syphilis.

In conjunction with Gillingham arrangements were made for the showing of the Film "End of the Road," which was attended by a very large audience.

Tuberculosis.

The arrangements for the treatment of Tuberculosis are conducted by the County Council. The duty of inquiry in respect of notified cases is carried out by the Local Authority.

PULMONARY TUBERCULOSIS.

There were 57 deaths.

They belong to Wards as follows.

St. Mary's Ward	21
Christ Church Ward	8
Luton Ward	7
St. Paul's	8
St. Michael's Ward ...	6
St. John's	7

PRIMARY NOTIFICATIONS.

Private Practitioners	28
Hospital Cases	16
Poor Law Cases	6
School Medical Officer	8
 Total ...	 58

WARD DISTRIBUTION.

St. Mary's Ward	20
Christ Church Ward	7

Luton Ward	8
St. Paul's Ward	8
St. Michael's Ward	5
St. John's Ward	10
Ages.	
Under 5 years	None
5 and under 15 years	14
15 " 25 "	18
25 " 45 "	14
45 " 65 "	12
Sex--Males, 33 ; Females 25.	
Primary Visits	67
Subsequent Visits	120
Houses Cleansed	4
Houses disinfected	64

NON-PULMONARY TUBERCULOSIS.

The deaths numbered 11, from Tuberculous Meningitis 4, other forms of Tuberculosis 7.

PRIMARY NOTIFICATIONS.

Private Practitioners	4
Hospital	4
School Medical Officer	2
Ages.	
Under 5 years	1
5 and under 15 years	5
15 " 25 "	1
25 " 45 "	3
Sex Males, 4 ; Females 6.	

CLASSIFICATION.

Glandular	5
Bones and Joints.....	3
Other parts	2

TUBERCULOSIS DISPENSARY.

I am indebted to the Tuberculosis Officer for the subjoined information respecting cases from Chatham.

No. of new patients	150
Total attendances of old and new patients	2655
No. sent to Institutions	61

DIAGNOSIS—NEW PATIENTS.

Pulmonary Tuberculosis	81
Surgical Tuberculosis	23
Bronchitis	13
Other Diseases	10
Apparently healthy.....	9
Under observation	14

From the above return it appears that 46 of the cases or 30 per cent. were not definitely Tubercular.

The true functions of the Dispensary are two fold—the treatment of Tuberculosis, and the examination of contacts in order to detect the disease in its early stages.

The pressure on the Dispensary is so great that the latter cannot be carried out, and it has become the equivalent of a Hospital out-patient department devoted to the routine examination and treatment of cases attending, and quite unable to actively participate in preventive work.

Experience shows that one essential in Pulmonary Tuberculosis is early detection and treatment. At present this is not attained. Notifications and deaths about balance each other, and it is obvious that many cases are not detected and notified until the disease has reached a stage at which arrest is improbable. The following are examples.

Date of Notification	Date of Death	Interval
January 22nd, 1920	February 29th, 1920	5 weeks
February 19th ,	March 3rd ,	12 days
February 19th ,	March 20th ,	4 weeks
March 15th ,	June 2nd ,	11 weeks
April 5th ,	May 9th ,	5 weeks
April 13th ,	April 14th ,	1 day
April 13th ,	May 7th ,	3 weeks
April 19th ,	June 13th ,	8 weeks
May 14th ,	May 25th ,	11 days
May 14th ,	May 14th ,	nil.
August 9th ,	August 17th ,	8 days
November 19th ,	December 30th ,	6 weeks

The above represent the most glaring cases, and in these as in many others the disease must have been evident for a long period prior to being notified.

There are excellent Tuberculosis wards at the Medway Infirmary. Admission is not confined to Paupers. The 36 beds are rarely filled, and with the existing demand for institutional treatment it is a pity that greater use is not made of these beds.

If we are ever to see a material diminution of Tuberculosis, it will be by the application of two methods.

One is the earlier recognition and treatment of the disease, and the other is the segregation of advanced cases which are the most infective of all.

E.—Maternity and Child Welfare.

Work directed to this end comprises supervision of Midwives, visiting and inquiries under the notification of Births Act, and attendance at the Maternity Centre.

MIDWIVES.

The supervision of Midwives under the Act of 1902 is carried out by the County Council. The Act of 1918 entirely relieves non-County Boroughs of any control over Midwives in their districts. In the case of Boroughs where there are Maternity Centres it would be better if this control was in the hands of the Local Authority and under the direct supervision of the Medical Officer of Health.

The work of the Midwife is intimately connected with the work of the Maternity Centre, and as regards expectant mothers better results would be obtained than under the present system.

There are nine registered Midwives in the Borough—five being certificated and the rest bona-fide Midwives.

PUERPERAL FEVER.

There were 3 notifications and 3 deaths.

From other accidents and diseases of pregnancy and parturition there were 4 deaths.

Nursing assistance was offered in each case and accepted in one.

HEALTH VISITORS.

There are three Health Visitors. Two give the whole of their time to this work and one gives 3 quarters of her time, the other 1 quarter being devoted to work at the Minor Ailments Clinic for school children.

Their duties are as follows :

- (a) Visits under the notification of Births Act.
- (b) Visits and home nursing of cases of Influenza, Pneumonia, Measles, Whooping Cough, Ophthalmia Neonatorum and Epidemic Diarrhoea.
- (c) Visits to cases of Tuberculosis and Puerperal Septicæmia.
- (d) Attendance at Welfare Centre.
- (e) The keeping of systematic records of work.
- (f) To note and report insanitary conditions.
- (g) To carry out duties under the Factory Acts where women are employed.

They are available for any special work, and at times it is necessary to restrict activities in one direction, and to concentrate on any disease or conditions of exceptional prevalence.

Two Health Visitors are in attendance at each session of the Maternity Centre, and one supervises the sanitary condition of Women's Public Conveniences.

Each Visitor makes a monthly report of her duties.

That their work is beneficial is beyond doubt, and it is generally appreciated by the mothers. Interest in child welfare is stimulated—the mother realises her responsibilities and commits fewer mistakes. The beginnings of disease receive an earlier recognition, and medical aid is secured in time to avert the onset of serious disease. The work is bearing fruit in the shape of healthier babies, and diminished mortality. The preservation of health rather than the treatment of disease is the object kept in view, and success is largely dependent on the tactful way in which the duties are performed.

NOTIFICATIONS OF BIRTHS ACT, 1907.

The Borough is divided into three districts, one of which is allotted to each Health Visitor.

Cases are visited for the first time at the end of ten days where a Midwife has been in attendance, and Doctors cases at the end of 14 days.

The average number of visits paid to all infants during the first year of life is 8. To such as are ailing and delicate extra visits are paid.

After the end of the first year visiting is continued at less frequent intervals—generally once every three months.—The children visited are those who are ailing and delicate, and who are attending the Maternity Centre.

The Health Visitors get into touch with expectant mothers as far as possible, and visit all who attend the Centre.

Primary visits to expectant mothers, 50. Secondary visits, 72. Total, 122.

Out of the 1213 Births belonging to Chatham—1160 were registered in the Borough. Of this number, 1119 were notified.

By Doctors	202
By Midwives	917
By Registrar	67

Thus by Doctors and Midwives only there were notified 1119 or just over 96 per cent.

Table showing work under the Act during 1920.

Total visits paid	6986
Number of breast fed infants	587
Number fed with breast and bottle	318
Number fed with bottle only	186
Defective addresses	31
Removals	64
Houses Clean	623
Houses fairly clean	397
Houses dirty	89
Houses improved after visits	42
Number of stillborn infants	46
Doctors cases not visited	60
Deaths during visits	76
Number of mothers employed	86

Nature of employment :—

Outworkers	19
Charwomen	20
Shops	14
Hawkers	18
Needlework	4
Laundry	2
Field workers	3
Various	6

Seventy-eight children over 1 year of age were kept on the lists, and periodically visited. Some were brought to the Centre, and advice given as to treatment.

STILL BIRTHS.

46 were reported.

The alleged causes were as follows :—

Difficult and prolonged labour	17
Maternal falls	6
Multiple births	4
Convulsions	2
Inattention at birth	3
Various, such as mother's health, worry, etc.	14

A considerable proportion of premature and still births are due to the presence of Venereal Disease in the parents.

Of the deaths of infants occurring during the period of visitation there were :

- 23 during the 1st week.
- 13 between the 2nd and 4th weeks.
- 12 between the 4th and 8th weeks.
- 28 between the 2nd and 12th month

Twenty-two of the above were premature births, and 63 per cent. of the total deaths occurred during the first 8 weeks of life.

EPIDEMIC DIARRHŒA.

Owing to the absence of any great or prolonged heat, and probably to the increased use of dried milk for infant feeding there was very little Diarrhoea. Special visits are paid to all known cases, and special attention is given to houses of an insanitary character.

MEASLES AND WHOOPING COUGH.

All reported cases are visited, advice is given, medical attendance urged, and in many cases nursing assistance is given.

OPHTHALMIA NEONATORUM.

Cases notified 12

By Doctors	10
By Midwives	2

In all cases medical attendance was secured. In 4 instances this was delayed until the Health Visitor informed the Mother of the serious nature of the disease.

Some of the cases were discovered by the Health Visitors, and were stated to have begun after the Midwife's attendance ceased. Daily visits were paid where necessary and the methods of applying remedies pointed out. In all cases recovery was complete without permanent damage to sight.

Other work includes the extra visiting of delicate infants, of unsatisfactory mothers, and the reporting of insanitary conditions.

In several cases of neglectful parents the Inspector for the Society for the Prevention of Cruelty to Children has given valuable assistance.

ILLEGITIMATE AND BOARDED OUT CHILDREN.

The local provision includes the Medway Workhouse, the Salvation Army Rescue Home, and the Rochester Diocesan Society's Home. The accommodation at the two latter is small, and has the further disadvantage that the inmates include girls on probation from Court, and others of an undesirable class.

A Register of boarded out children is supplied by the Inspector under the Children Act, and the Homes are visited regularly to see that the conditions are suitable, and that the children are properly cared for, and brought to the centre.

VOLUNTARY ORGANISATIONS.

There is one Voluntary Society in the district, but its work is chiefly of an educational character. In the case of delicate children arrangements have been made for co-ordination with the School Medical Department.

MATERNITY HOME.

During the year an endeavour has been made to give effect to the proposal to establish a home for lying in women, but the only suitable premises could not be secured owing to certain clauses in the covenants. Attempts were made to secure co-operation with Rochester and Gillingham, and the latter Borough agreed to discuss the matter, and I was requested to draw up a scheme for submission to a Joint Committee. This has been done, but before any meeting was called a communication was received from the Committee of Royal Naval Benevolent Society, who had applied to the Ministry for grant in aid. They were advised that before this could be considered co-operation should be effected with the Local Authority, and that they should endeavour to come to an arrangement with the Town Council of Chatham under which cases of women who are eligible for admission to the Home, and who are discovered in

the course of the Council's Maternity work to need in-patient's accommodation should be received into the Home in return for an annual contribution from the Town Council. On Dec. 2nd a deputation of the Maternity and Child Welfare Committee had an interview with the Royal Naval Committee, and as a result the following proposals were considered and afterwards approved.

1. That women resident in the Borough of Chatham, not being wives of Sailors or Marines should be eligible for admission to the Royal Naval Maternity Home.
2. The Town Council of Chatham will contribute to the funds of the Home on terms to be agreed upon.
3. The Town Council does not ask for any share in the arrangement.

The Royal Naval Committee have ascertained through Counsel's opinion that the proposed arrangement will not be in contravention of their Trust Deed, and it has recently been definitely settled. Detailed arrangements will in due course be effected, but beds will not be available until the completion of the New Home now in course of erection.

The arrangement above outlined is the most satisfactory and economical that could be made, and will supply a much needed want.

The only available accommodation at present is the Medway Infirmary which has 8 Maternity beds, but it is only a limited class who avail themselves of these.

MATERNITY AND CHILD WELFARE CENTRE.

This is held at the Public Library, and the accommodation has now been improved by the provision of a third room. It comprises waiting room, weighing room, and Medical Officers room. Consultations are held on Tuesdays and Fridays 2.30 to 4.30 p.m. and on Thursdays the Centre is open for the purpose of weighing, and for occasional talks to mothers on subjects pertaining to the management of children. These are given by the senior Health Visitor.

Two Health Visitors attend each session.

The number of new cases during 1920 was 446, as compared with 317 in 1919, and 264 in 1918.

Thirteen of the cases were expectant mothers.

The number of cases is equal to 38 per cent. of registered births

The total attendances were 2516—an increase of 1010 over the previous year.

There were 323 children born in 1920, and 110 continuing from previous years. 28 children were between the ages of 2 and 5 years.

The attendances during each quarter were :—

First Quarter	512
Second „	689
Third „	704
Fourth „	611
	<hr/>
Total	2516

Twenty-eight cases were referred to the Hospital for treatment, and one to the Tuberculosis Dispensary.

The Hospital cases were :—

Phimosis	7
Adenoids	2
Otitis Media	2
Hydrocele	1
Ophthalmia Neonatorum	1
Squint	1
Hare Lip	1
Tubercular disease of Elbow	1
Abscess of Buttock	1

DENTAL TREATMENT.

Arrangements have been effected for the Dental treatment of expectant mothers by the School Dentist at a fee of 5s. for each case, and a charge for upper or lower denture of £3 10s. od.

FEEDING OF INFANTS.

When first attending infants were being fed as follows :—

Breast only	203
Breast and Bottle	93
Bottle only	111

Breast feeding is advocated as the best of all methods, and should be more widely practised. The mothers liberty is somewhat restricted, and many are too ready to adopt artificial feeding. There are two very prevalent evils in connection with infants—one is the use of the "comforter," and the other irregularity in feeding. The latter is easily remedied with great benefit to mother and child, but in spite of advice the use of the "comforter" continues.

SUPPLY OF DRIED MILK.

The preparation supplied at the Centre is Glaxo. It is well tolerated by almost every child, and is a most satisfactory food. Not only is it easily digested, but it is less liable to contamination, than ordinary cow's milk.

It is supplied to mothers attending the Centre at cost price.

MILK (MOTHERS and CHILDRENS) ORDER, 1919.

Under the provisions of this order Dried Milk is supplied to Nursing Mothers and Children free of cost or at a reduced price in cases where the circumstances of the parents are such that an adequate supply cannot be provided. Great care is exercised to see that there is no overlapping with the Poor Law Authority, and no milk is given without due inquiry into income, etc., and with the sanction of the Medical Officer.

The following scale of income is used. 10s. per each adult, and 8s. for each child under 14 per week. An inquiry card is filled up and signed by each applicant, and the information received is confirmed by the Health Visitors.

All Dried Milk is distributed from the Centre, and regular attendance is enjoined.

No drugs are supplied at the Centre except a few Grey Powders, other materials are obtained from a Chemist, but if treatment is necessary—the services of a doctor are always advised.

The Centre held at 90 High Street, in connection with the Royal Naval Benevolent Society has been discontinued. It was confined to the wives and children of Naval ratings, the numbers attending were very few, and as these were equally eligible for attendance at the Municipal Centre, the Committee decided to close it.

I am satisfied that the Council's Centre is doing good work, and that it is exercising an influence which is of the greatest benefit to the mothers and children who attend, and also indirectly in the case of many who do not attend, but who are regularly visited by the Health Visitors. The work is quietly, steadily, and unostentatiously carried on, and no encouragement is given to Baby Competitions, which are in my judgment an unnecessary waste of time and effort, and which divert Health Visitors from regular work. The results generally lead to dissatisfaction on the part of the unsuccessful children.

Motherhood should be cultivated for its own sake—it is a duty to be incalculated, not manufactured for prizes, and the object of a Maternity Centre is not the culture of babies for show.

F.—Sanitary Administration.

The staff of the Public Health Department consist of :—

Medical Officer of Health, also in charge of Child Welfare Centre.

One Chief Inspector of Nuisances and Food Inspector.

Two Assistant Inspectors.

Three Health Visitors.

Two Clerks.

The Inspectors and Health Visitors work under the general direction of the M.O.H. Each Inspector is charged with certain general duties, which he carries out as a matter of routine, in addition to special matters which may require urgent attention.

ADOPTIVE ACTS IN FORCE IN THE BOROUGH.

The Infectious Diseases Prevention Act 1890

Public Health Amendment Act 1890

Public Health Amendment Act 1907

G.—Housing.

1. GENERAL.

One of the oddest things in connection with housing is that the vast amount of labour, energy and talk which has been expended in the subject has been productive of such small results. It seems to be generally acknowledged that the men and women of a nation constitute its true wealth and yet they cannot get houses. But when we get away from ideals, and come down to plain, hard, monetary facts then we find the reason. In the past workmen's dwellings including those appalling tenement edifices humorously called model dwellings have been the result of a pure business compromise between what was wanted and the money available—the latter being strictly limited by the relation of rent to the interest required on invested capital. The present position which has now obtained for a long period is that the erection of dwellings is not a profitable speculation, and naturally no builder will undertake work under such conditions.

Labour and materials are now so dear that the amount of rent which a tenant can pay does not give a sufficient return upon

the capital invested. Houses were and are urgently needed, and at the end of the War the Government was faced with the necessity of taking action. The situation was without a precedent, and it was quite clear that without State Aid houses would not be forthcoming, and it was also abundantly clear that slum property would persist and deteriorate for the simple reason that however bad a house may be—it must remain occupied if no other is available. Under the circumstances the Government embarked on one of the greatest constructive schemes recorded, one which had for its ideal a complete reformation of the scandalous and insanitary conditions under which many people are compelled to live, providing for the clearance and improvement of insanitary houses and areas, and for the better planning of new districts. Its necessity was acknowledged, but it has been subjected to bitter criticism and hostility and has literally had to fight its way through the opposition and inertia not only of those who did not approve of the financial aspect, but of the very people who would benefit by improved housing conditions.

The dominant factor in the situation is that houses must be built, and if structures which necessitate skilled labour cannot be erected because of the lack of skilled workers then other forms of construction must be adopted.

Although progress has been slow—work is proceeding, some houses are being erected, and a few will shortly be ready for occupation.

In Chatham—a site has been acquired, $32\frac{1}{2}$ acres in extent, on which it is proposed to erect 300 houses, and at the present time a first instalment of 52 are in course of erection, to be followed by 50 others this year. In January last a prize was offered for the best lay out, and the design selected, with some modifications, has been approved.

The houses now being erected in groups of four, contain living room, parlour, scullery, etc., 3 bedrooms and bath room, and a provisional rent of 10s. 6d. has been suggested, exclusive of rates. The cost per house is not exactly known, but will be over £1100. In addition to these plans for 24 new dwellings erected by private owners were approved.

Many meetings have been held for discussion of ways and means, and there have been interviews with the housing Commissioner on various points in connection with the Scheme.

It must be clearly understood that the primary necessity is the provision of new houses, because it is on this factor that all future action depends. We want houses for two reasons—one to

meet the demands of increased population, and the shortage brought about by war conditions, and the other for the re-housing of people who will be dispossessed by the closure and demolition of insanitary dwellings.

Chatham has a large number of old and insanitary dwellings, chiefly situated in St. Mary's Ward and in the older portions of St. John's Ward. No real improvement is possible until more accommodation is available, and the sooner that many of these dwellings become things of the past, the sooner there will be an improvement in the health of the district, combined with the increased prosperity which will follow the provision of a better type of house.

The first portion of insanitary property to be dealt with is what is known as the Brook Area. Its demerits are widely known, and during the past year it has been much discussed, but for reasons above stated no practical effect has resulted.

At a meeting of the Housing and Town Planning Committee held on February 18th, 1920, the following resolution was carried "Resolved that the Borough Surveyor in conjunction with the Medical Officer of Health prepare pencil plan of the area to be laid out, and embodying proposals for re-housing thereon in tenement properties, and submit same to this Committee prior to obtaining the views of the Ministry of Health on that matter"

During the discussion which took place I stated that I was opposed to the erection of tenement houses, and the terms of the resolution embodied proposals which I could not approve.

This area cannot be dealt with alone, it is part of the general scheme of improved housing in the Borough, and before any clearance begins accommodation for the dispossessed tenants must be provided elsewhere.

The proposal to provide tenement houses is contrary to the principles which lie at the root of better housing, and I have stated my objections in a report dated April 12th. These objections relate to blocks of dwellings of more than two stories and are not offered in respect of a limited number of two storey flatted dwellings.

Although this area has been declared unhealthy it does not follow that every house on the area should be demolished, because the removal of a proportion will relieve the congestion, will improve the light and ventilation, and will conduce to general betterment. For this reason, it appears to me that the best results will be obtained and the expenditure will be materially reduced if a policy of partial

clearance and reconstruction is carried out. This policy embodies the following principles :

1. The removal of the worst and most insanitary houses.
2. The reparation and reconstruction of others.
3. The standard of reconstruction to require that each house shall be :—
 - (a) Free from damp.
 - (b) Well lighted and ventilated.
 - (c) In good general repair.
 - (d) Properly drained, and provided with a sink and separate sanitary convenience, and
 - (e) Shall possess adequate washing accommodation, a place for the storage of food, and its own yard.

Details of such houses as ought to be demolished, and of others which could be reconstructed have been placed before the Committee.

At present there are 137 dwellings. The proposed clearance will leave 80—24 of which are back to back, and could be made into through houses leaving a total of 68.

Allowing 20 houses to the acre it would then be possible to erect 22 new dwellings—the area being $4\frac{1}{2}$ acres.

The result would be an elimination of the worst houses, a reduction of density and the provision of more open space in the vicinity of the houses. This improvement can be effected by the exercise of powers under the Housing Act, 1919. It defines the worst part of the area which should have primary attention, and it will be more economical than a complete clearance, which involves the re-housing of all the displaced tenants.

The houses which remain could be dealt with either by arrangement with the owners or by compulsory acquisition and renovation by the Council.

With a view of taking early action on the above lines, instructions were given for the preparation of plans showing the cleared site, and for the erection of dwellings in the Vicinity, some of which would be two storey flats.

I trust that the ensuing year will see some progress in this long overdue reformation of an area which reflects no credit on the district. Its squalid condition and its bad influence on the health, the morals, the character, and the social condition of the people loudly calls for remedial measures.

With regard to the general housing conditions in the Borough, a survey has been continued during the year and details of all houses situated in the district bounded by Whittaker Street, New Road, Clover Street and High Street, in the district known as the Mount, in the district lying between Ordnance Street and Priest Dale, in the Cage Lane district, and in the various Courts and Alleys adjoining the High Street have been obtained and filed.

The majority of these houses are in various stages of disrepair, a large proportion are damp, none of them have satisfactory provision for keeping food, many are without sinks, and users of a common tap. Defective ventilation, lighting and dirty interiors are common.

It will be impossible to make a clean sweep of this Class of property, but every endeavour will be made to get it put and kept in a reasonably fit condition, but the process will be gradual and slow, besides which the present high costs attendant on the work must be considered.

In cases where the occupier is to blame for the dirty state of the interior it is the practise to issue notice on him to do the necessary cleansing, but he cannot be called upon to deal with structural defects. Unfortunately there are many of these bad tenants, and I should like to see more drastic legal powers for dealing with the dirty and neglectful tenant. After all the letting of a house is a bargain in which there are obligations on both sides.

Figures given in another part of this Report (page ...) with respect to the mortality in different parts of the Borough show that bad health and a high death rate have an intimate relation to the housing and social condition of the people.

Nearly one third of the deaths in the Borough were of persons residing in or removed from St. Mary's Ward on account of disease, and in practice it means that if the present housing conditions in that Ward were assimilated to those of the other wards much disease and many deaths would be avoided—and the general death rate materially reduced.

Forty per cent. of the deaths from Tuberculosis were of residents in this district.

With the exception of the districts above mentioned the general type of house is satisfactory. There is an undoubted shortage of accommodation and until private enterprise in building resumes its activities this shortage will remain.

It is difficult to forecast the needs of a Dockyard town, but it is probably that a set back to the increase of population will occur in the near future on account of impending discharges from the yard.

OVERCROWDING.

At present there is considerable overcrowding, a very large number of houses containing more than one family.

The causes are due to the total lack of building since 1914, to the normal increase of population, and to the large number of men hitherto employed in the Dockyard. The problem can only be solved by the provision of more houses.

In the worst cases coming to the knowledge of the department notices to abate overcrowding have been served, but in only 2 instances was it possible to secure other accommodation. In some cases a partial relief has been effected by getting a larger number of rooms for the large family. For example it is quite common to find 2 separate families in a house—one with 2 or 3 persons the other with 6 or 7. The smaller family may be taking up 3 rooms, leaving 2 only for the large family. The evils of overcrowding are partially remedied by re-arrangement of sleeping accommodation.

FITNESS OF HOUSES.

I have already outlined the general standard of housing, and the general character of defects.

With regard to the latter there is evidence that many of them might be avoided if better supervision was exercised, and if minor repairs were attended to at an earlier date. It is rare that the collector of rents ever gets farther than the front door, and as far as personal observation is concerned he is ignorant of the presence of defects, which being unremedied get from bad to worse until the Local Authority takes action, when the owner is put to considerable expense which he naturally resents, and which might have been avoided.

ACTION TAKEN.

Housing defects are dealt with under the provisions of the Public Health Act 1875—in all cases of minor defects and nuisances, and where these defects render the dwelling not reasonably fit in all respects for human habitation notices are served under Section 28 of the Housing Act of 1919.

Closing orders under Section 17 of the 1909 Act are available for the worst type of house, but the difficulty of securing accommodation for displaced tenants has prevented their application except in 2 instances where the houses happened to be empty.

Considerable delay occurs in carrying out necessary works. Cost of materials, cost and shortage of labour, and large demands on the services of builders are the chief reasons, and in others inability on the part of owners to comply with the terms of notices.

Ample time is allowed, and when work is not done within a reasonable period the first step is to request the owner to appear before the Committee, with a view of hearing and considering any reasonable objections.

Failing an arrangement further procedure is in accordance with other provisions of the Housing Act.

Probably the best solution of these difficulties would be through the medium of a repairs department which would undertake the necessary work and charge the cost to the owner.

This method would be applicable to cases where builders undertake the work and then fail to complete it.

As regards back to back houses—owners will be asked to convert them into through dwellings as opportunity serves.

There are still several groups of houses with one common tap in the yard, but their numbers are being gradually diminished. The lack of closet accommodation is being remedied as quickly as possible.

UNHEALTHY AREAS.

Only one is under consideration, and no representation has been made in regard to any other.

BYE-LAWS.

The provisions of existing Bye-Laws have been adhered to, and there has been no relaxation under Sec. 29 of the Act of 1919.

APPENDICES.

HOUSING CONDITIONS.

STATISTICS.

Year ended 31st December 1920

1.—GENERAL.

(1) Estimated population	48,000
(2) General death-rate	12.8
(3) Death-rate from Tuberculosis ...	1.7
(4) Infantile mortality	70

(5)	Number of dwelling-houses of all classes	9616
(6)	Number of working-class dwelling houses	9000
(7)	Number of new working-class houses erected	52 nearly completed

2.—UNFIT DWELLING-HOUSES.

1.—Inspection.

(1)	Total number of dwelling-houses inspected for housing defects (under Public Health or Housing Acts)	651
(2)	Number of dwelling-houses which were inspected and recorded under the Housing Inspection of District) Regulations 1910	181
(3)	Number of dwelling-houses found found to be in a state so dangerous or injurious to health as to be unfit for human habitation	
(4)	Number of dwelling-houses (exclusive of those referred to under the preceding sub-heading) found not to be in all respects reasonably fit for human habitation	

II.—Remedy of Defects without Service of formal Notices.

Number of defective dwelling-houses rendered fit in consequence of informal action by the Local Authority or their officers	433
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III.—Action under Statutory Powers.

A. *Proceedings under section 23 of the Housing, Town Planning, &c., Act 1919.*

(1) Number of dwelling-houses in respect of which notices were served requiring repairs	77
(2) Number of dwelling-houses which were rendered fit—	
(a) by owners	55
(b) by Local Authority in default of owners	
(3) Number of dwelling-houses in respect of which Closing Orders became operative in pursuance of declarations by owners of intention to close	None

B.—*Proceedings under Public Health Acts.*

(1) Number of dwelling-houses in respect of which notices were served requiring defects to be remedied	147
(2) Number of dwelling-houses in which defects were remedied—	
(a) by owners	135
(b) by Local Authority in default of owners	0

C. *Proceedings under sections 17 and 18 of the Housing Town Planning &c. Act 1909.*

(1) Number of representations made with a view to the making of Closing Orders ...	2
(2) Number of dwelling-houses in respect of which Closing Orders were made	2
(3) Number of dwelling-houses in respect of which Closing Orders were determined the dwelling-houses having been rendered fit	1

- (4) Number of dwelling-houses in respect of which Demolition Orders were made
- I
- (5) Number of dwelling-houses demolished in pursuance of Demolition Orders

4.—UNHEALTHY AREAS.

Areas represented to the Local authority with a view to Improvement Schemes under (a), Part I., or (b), Part II., of the Act of 1890 :—

- (1) Name of area
- (2) Acreage
- (3) Number of working-class houses in area
- (4) Number of working-class persons to be displaced.....

4.—Number of houses not complying with the building bye-laws erected with consent of Local Authority under section 25 of the Housing Town Planning, &c., Act, 1919.....

5.—Staff engaged on housing work with, briefly, the duties of each officer.....

M.O.H. and 2 Inspectors

Inspectors make primary visits and report to M.O.H., who decides on procedure and personally visits houses to be dealt with under Housing Acts.

FACTORY AND WORKSHOP ACT 1901.

Section 132 of the above Act requires that a Medical Officer of Health shall in his Annual Report to his Council, make special mention of the Administration of the Act in Workshops and Work-places.

The duties of a Council are in respect of the sanitary conditions of factories, workshops and workplaces. As regards factories in which mechanical power is used the Factory Inspectors of the Home

Office are the responsible officials. They advise the Sanitary Authority of the existence of defects, and it is the duty of that Authority to secure remedy.

In regard to bakehouses and domestic factories there are special provisions. The chief sanitary requirement is the enforcement of suitable and sufficient sanitary conveniences.

The general duties respecting workshops and workplaces are in connection with cleanliness, air space, ventilation, drainage of floors where wet processes are carried on, and the provision of sufficient and suitable sanitary accommodation.

In connection with Home-work—lists of outworkers furnished twice yearly by employers are kept, and it is the duty of the Local Authority to inspect the homes in order to prevent homework being carried on under unsuitable and insanitary conditions or in dwellings where infectious disease exists.

Details of work will be found in the following Table.

Factories, Workshops, Laundries, Workplaces and Homework.

BOROUGH OF CHATHAM.

1.—Inspection.

Including Inspections made by Sanitary Inspectors or Inspectors of Nuisances.

Premises.	Number of		
	Inspections	Written Notices.	Prosecutions.
Factories (including Factory Laundries)	19	0	
Workshops (including Workshop Laundries)	162	5	
Workplaces (other than Outworkers' premises included in Part 3 of this Report)	21	0	
Total	202	5	

2.—Defects Found.

Particulars.	No. of Defects.			
	Found.	Remedied.	Referred to H.M. Inspector.	Prosecutions.
Nuisances under the Public Health Acts :—				
Want of cleanliness	3	3		
Want of ventilation	0	0		
Overcrowding	0	0		
Want of Drainage of floors	0	0		
Other Nuisances	2	2		
Sanitary { insufficient	1	1	1	
Accommodation { unsuitable or defective	0	0		
{ not separate for sexes	0	0		
Offences under the Factory and Workshop Act :—				
Illegal occupation of underground bakehouse ..	0	0		
Breach of special sanitary requirements for bakehouses	2	2		
Other offences (excluding offences relating to outwork which are included in Part 3 of this Report)	0	0		
Total	8	8	1	

3.—Homework.

Wearing Apparel— (1) making, &c.							Notices served on Occupiers as to keeping or sending lists	Outwork in Unwhole- some Premises	Outwork in infected premises			
	Sending twice in the year.			Sending once in the year.								
	Lists.	Contractors.	Workmen.	Lists.	Contractors.	Workmen.						
	9	0	990	0	0	0	2	1	1	4	4	
Total	9	0	990	0	0	0	2	1	1	4	4	

4.—Registered Workshops.

Workshops on the Register at the end of the year.	Number.
Tenement Workshops	0
Workshop Bakehouses	9
Domestic Workshops	44
Laundries (Workshops)	2
Other Workshops	129
Total number of Workshops on Register	184

5.—Other Matters.

Class.	Number.
Matters notified to H.M. Inspector of Factories :—	
Failure to affix Abstract of the Factory and Workshop Acts ..	0
Action taken in matters referred by H.M. Inspector as remediable under the Public Health Acts, but not under the Factory and Workshops Acts :—	
Notified by H.M. Inspector	2
Reports (of action taken) sent to H.M. Inspector	2
Other	0
Underground Bakehouses :—	
Certificates granted during the year	0
In use at the end of the year	4

RAINFALL DURING 1920.

Taken at Luton Waterworks, Chatham, by Mr. Coles Finch

January	2.41	inches.
February .....	.36	"
March .....	.72	"
April	2.91	"
May .....	.59	"
June	1.38	"
July	2.92	"
August	1.60	"
September	3.84	"
October .....	.75	"
November .....	.76	"
December	1.93	"
 Total	 20.17	 "

Rain fell on 129 days during the year.